B6

TITLE : METHOD FOR EVALUATING
OPTIMUM INJECTION MOLDING
CONDITION UTILIZING FLOW
ANALYSIS AND INJECTION
MOLDING APPARATUS

ABSTRACT : PURPOSE:To provide a molding apparatus constituted so as to be
capable of determining the optimum molding condition by a simple
method.
CONSTITUTION:In order to perform the flow analysis of the molten
material in a mold, a product shape model is divided into fine
elements (S1) and a standard temporary temp. condition is set
(S2) and (n) filling times are set (S3, S5). Then, flow analysis
is performed to calculate the max. values of shearing stress
changing timewise in the respective fine elements (S4). As a
result, graphs showing the relations between filling times and
the max. values of shearing stress are calculated with respect t
(m) fine elements (S6) and, with respect to (m) kinds of the
graphs, the filling time wherein the difference between the max.
values of shearing stress of the respective graphs is calculated
to be determined as the optimum filling time (S7) and,
thereafter, the evaluation of other molding conditions is
performed.